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REPORT OF THE EXPERT MEETING ON CAPACITY-BUILDING IN THE AREA OF ELECTRONIC COMMERCE: HUMAN RESOURCE DEVELOPMENT

Held at the Palais des Nations, Geneva,
from 29 June to 1 July 1998

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I. AGREED RECOMMENDATIONS[1/]

A. Background

1. Experts recognize the importance of electronic commerce for trade and development, and the significance of UNCTAD's contribution to current and future activities affecting electronic commerce. They consider in particular that UNCTAD has a comparative advantage in its ability to combine an analytical and an operational approach to the issues related to electronic commerce. It also has the comparative advantage of being able to offer a cross-sectoral approach to electronic commerce, benefiting from its mandate and expertise in a large array of trade-supporting sectors and activities, including trade facilitation, customs, banking, insurance and transport. These comparative advantages are especially important in addressing the training needs of developing countries, particularly those of the least developed countries.

B. Importance of human resources development for electronic commerce

2. Considering the fast pace of technological change, as well as the specificity of the legal, regulatory, social and economic challenges raised by the emergence of electronic commerce, it is of primary importance that all countries should benefit from adequate tools for the development of the necessary human resources in this area. Particular importance should be given to enhancing the capacity of smaller firms (small and medium-sized enterprises) to participate in electronic commerce.

3. The experts consider that much effort is needed to enhance developing countries' capabilities to better grasp the meaning and possible impact of electronic commerce. The provision of definitions, analyses and economic studies of the trade-and-development impact of electronic commerce (as well as of existing proposals related to electronic commerce) will be critically important in this respect.

4. The experts emphasize that enhanced knowledge, experience and awareness in the area of electronic commerce will contribute to increasing the level of interest and the quality of participation of developing countries in international discussions relevant to electronic commerce, including those on standards. Such collective efforts will thus contribute to the setting of a framework for global electronic commerce with positive benefits for all participants.

[1/] As adopted by the Expert Meeting at its closing plenary meeting on 1 July 1998.

C. Recommendations to UNCTAD

5. In cooperation with the relevant institutions, UNCTAD should pursue its technical cooperation activities in the area of human resource development for electronic commerce, in particular through the training of trainers. Three main targets should benefit from UNCTAD's assistance in this area, namely:

(i) Policy makers and negotiators;

(ii) Small and medium-sized enterprise managers and trade practitioners;

(iii) Technicians, including specialists in electronic data interchange and the Internet.

6. UNCTAD is called upon to pursue its work in the following areas:

(i) Conceptual and quantitative analyses of the impact of electronic commerce on trade and development;

(ii) Organization of regional seminars to raise the level of awareness of member States about the possibilities and challenges of electronic commerce, as well as about the current state of specific debates (proposals for a global framework for electronic commerce, international negotiations and discussions being held in various institutions);

(iii) Production and dissemination of training packages for electronic commerce, in particular through its TRAINFORTRADE/electronic trade initiatives, undertaken in cooperation with other organizations and financed by the United Nations Development Programme (UNDP); the use of modern interactive techniques, including CD-ROM and Internet-based techniques, as well as of distance-learning packages, should be encouraged, taking into account local cultural and language specificities;

(iv) Use of the Global Trade Point Network as an instrument for the dissemination of training tools for electronic commerce, and as an instrument for the continuous exchange of information and experiences among the practitioners of electronic commerce. In this respect, specific attention should be given to monographic training courses on contemporary software trends and the application of advanced technologies to electronic commerce.

7. In order to provide the most timely and relevant tools for human resources development in electronic commerce, UNCTAD should actively pursue its policy of inter-institutional cooperation, and mobilize substantive contributions from other institutions such as the World Trade Organization (WTO), the International Labour Organisation (ILO), the International Telecommunication Union (ITU), the International Trade Centre (ITC), the World Intellectual Property Organization (WIPO), the United Nations Commission on International Trade Law (UNCITRAL), UNDP, the United Nations Institute for Training and Research (UNITAR), the

International Bank for Reconstruction and Development (IBRD), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the International Chamber of Commerce (ICC), the Internet Society, the United Nations regional commissions and other regional organizations. In the context of such cooperation, UNCTAD could play a significant role in sensitizing such institutions to the importance of addressing electronic commerce in their own training activities.

8. The experts pointed to the need for potential donors and contributing partners to support financially and technically UNCTAD's efforts in this important area.

9. The experts encouraged UNCTAD to pursue its efforts in building partnerships with civil society to offer proper training tools in the area of electronic commerce. It was considered that the holding of the Partners for Development meeting in Lyon, France, from 9 to 12 November 1998, offered a historical opportunity to intensify those efforts. The Lyon meeting, following both the WTO ministerial meeting of May 1998, and the OECD ministerial meeting to be held in Ottawa, Canada, in October 1998, would provide an opportunity to stimulate positive contributions from all countries to the creation of a global framework for electronic commerce.

II. CHAIRPERSON'S SUMMARY

1. Discussions during the informal sessions followed a sequence intended to facilitate an increasing exchange of experience through the gradual introduction of topics. After issues concerning human resource development in general had been discussed, recent developments in the field of electronic commerce and resulting training needs were examined. Next, a detailed look was taken at training programmes already being prepared through international efforts; and, finally, the prospects for finding solutions through partnership arrangements were examined, with particular reference to the Partners for Development conference to be held in Lyon in November 1998. Inevitably, discussion went beyond those topics as it ranged over the issues and challenges; while the exchanges were fruitful for participants, they can be reflected only partially in this summary.

A. Key factors in human resource development

2. In introducing the first topic, the secretariat noted that:

(a) Human resource development should not be considered as training alone: ideally, training formed part of a continuum in which people were offered suitable education, took on functions adapted to their abilities and potential, developed their knowledge, skills and experience, and were both encouraged and enabled to use their growing competence. All that went hand-in-hand and underlying issues needed to be reviewed together.

(b) Training was intimately related to change: it might respond to change, and it might lead to change, but it must be accompanied by deliberate change in the environment where it was to be applied; so any proposals for training must recognize that infrastructure, systems and methods must change accordingly.

(c) Training too often failed to meet expectations, and in consequence failed to attract sincere support. Without that support, it became less effective and a vicious circle developed. When new training initiatives were taken, it was essential that the circle should be avoided or broken from the outset. Any training recommended must be able to attract full support from all concerned - professionals, managers, officials and personnel.

(d) Cooperative training programmes, such as TRAINFORTRADE and TRAINMAR, were a valuable way to improve both the quality and range of training available locally, but succeeded only if implemented as part of a human resource development policy - for which they could never be a substitute.

3. Experts agreed that a number of features had to be in place for countries or individual enterprises to succeed with electronic commerce; one of the most important was to have competent people in a range of positions, which could not be achieved without human resource development policies.

4. One speaker pointed out that training on modern systems was not easily absorbed by older people, which could lead to their unemployability. Related fears were expressed on the risks of marginalization, especially for small and medium-sized enterprises (SMEs) in Africa. However, other experts noted that electronic commerce was becoming progressively more user-friendly, and that training was becoming more accessible to all. Nevertheless, the rapid pace of change did mean that training must be flexible, renewable and continuous.

5. Experts suggested that countries should recognize the need to be engaged in an emerging digital economy; it was not enough simply to prepare for electronic commerce in isolation, or to master information technologies as a whole. Any successful society needed a wide cross-section of people who were aware of the issues involved and could contribute to resolving them. Studies carried out in Canada had found that non-technical people were often well-disposed towards recent electronic breakthroughs but did not appreciate the specific benefits they could bring. Creating such awareness was a widespread need and might be approached through both training and practical measures to bring people in general into everyday contact with technology. People needed to learn continuously, and the focus should be on learning rather than on training.

6. The great need for assistance and direction with respect to electronic commerce was expressed by experts from developing countries. However, there was no clear distinction between more and less advanced countries, all of which were at a learning stage in a fast-changing environment. All could benefit from the tools that needed to be developed and exchanged, but equally all could contribute. The comparative advantage of UNCTAD in providing guidance and support was recognized; experts insisted that UNCTAD should continue to be involved in issues concerning electronic commerce, in collaboration, wherever possible, with other organizations with specialized technical or regional competence.

7. Attention was drawn to the distinction between electronic commerce for consumer contacts and electronic commerce for business-to-business operations. Since the latter was seen as the motor for development, it should receive greater attention from UNCTAD.

B. Developments in electronic commerce

8. The secretariat noted that electronic commerce had become a major component of international trade; the technology was well established and the remaining barriers to its use lay in institutional issues, in particular those of a regulatory and cultural nature. The attitudes and abilities of personnel at many levels were of critical importance. People needed to be concerned about electronic commerce, able to establish goals, master its techniques and use them in an atmosphere of trust. To encourage that through training required the definition of target populations, topics and techniques:

(a) Target populations included policy makers, negotiators, managers, trader/practitioners and technicians involved in electronic data interchange;

(b) Topics must cover basic concepts, current developments, security and privacy issues, legal, fiscal and regulatory matters, and the practical aspects of implementation;

(c) Techniques already identified highlighted the necessity for: pooling the expertise of different partners, such as the World Trade Organization (WTO), the International Telecommunication Union (ITU), the World Intellectual Property Organization (WIPO), the International Trade Centre (ITC), the United Nations Institute for Training and Research (UNITAR), the United Nations regional commissions and non-governmental bodies; networking among users and all parties with experience to offer, bearing in mind the particular experience of UNCTAD in developing and coordinating training and commercial networks; and the use of advanced technologies, especially for interactive distance learning.

9. The participants agreed that electronic commerce would be a major source of development over the next few years; its importance would be seen through social inclusion as well as economic growth. However, electronic commerce could fulfil its potential only for those enterprises and countries that were able to adapt to its requirements, master the technology and use it creatively. In that respect, concern was expressed that developing countries might not be able to exploit the techniques involved and that, owing to their lack of knowledge and experience, they might not be able to promote and defend their interests in public forums when global standards came to be set.

10. Many organizations were involved in the global preparations for electronic commerce, dealing with such aspects as the legal framework, security of information and standards. Since they were under constant pressure from technical advances, the consultation process was seldom extended beyond those parties that were ready to participate immediately and actively. That acted to the detriment of countries which were not yet familiar with issues and practice, and provided a special reason for training on related issues to be made more widely available.

11. Several countries had set up high-level committees to deal with specific issues of electronic commerce. It was noted that different formats had been extremely useful in India, the Philippines and Turkey and the approaches followed there were recommended to others. Officials and executives needed, of course, to be aware of the underlying issues, and so there was a prior role for training and learning.

12. Concerning the population in need of training, speakers emphasized that electronic commerce was most often a private responsibility, but that public authorities should be aware of those issues underlying electronic commerce for which public support might be necessary. Officials should be attentive to human resource development needs, which one speaker thought to be a specifically public responsibility, and to enabling SMEs to start electronic commerce activities.

13. Large businesses could adapt to electronic commerce fairly easily, but the greatest challenge faced SMEs; the creation of a home page by SMEs could be a major factor in improving their fortunes. It was suggested that even that could be a big step for some SMEs: companies new to electronic commerce might need technical assistance to make a start as much as they needed training. However, as the range of technical assistance was limited, the preparation of basic training for wide dissemination, or simply guidelines, should remain a major goal. One speaker noted that such training was of particular importance for SMEs in the Republic of Korea, which he felt would benefit greatly from a cooperative training system as embodied in the TRAINFORTRADE concept.

14. Other speakers voiced the concern of many countries about the predominance of English as a working language for electronic commerce, as that might prevent some users from fully participating in it and enjoying the benefits it had to offer. However, it had been shown that the new technology provided great flexibility and the potential existed for wide access by means of less-used languages. That flexibility offered particular benefits for SMEs in developing countries, but there was clearly a barrier, which might require software, technical support and training to be offered together. There was a dual need for knowledge, probably through training, of Internet English and the use of interpretation software. Again, the emphasis on widening knowledge and skills rather than on formal training showed that the goal of human resource development must be seen in terms of establishing a learning environment.

15. Some more advanced countries had gained experience that was directly applicable in other countries, opening up an attractive area for partnership activity, so that experience could be exchanged at first hand. While specific opportunities for learning from experience had been identified in countries such as Canada, India and the United Kingdom, which at an early date had adapted their policies to the new technology in commerce, useful experience could be found almost anywhere and needed to be made known. For example, an organization from China had been able to benefit from foreign links established through the Trade Point Network of UNCTAD.

16. Experts thought it would be helpful if successful experience could be identified and disseminated through case studies conducted by UNCTAD. In particular, a diversity of specialized training opportunities existed in areas associated with electronic commerce - for instance a distance-learning package for forwarding agents from the United Kingdom was described - and needed to be more widely known. The Brussels Trade Point was already taking steps to disseminate its successful experience through a system of "parrainage".

17. Experts believed it would be a good start if information sources were identified and publicized. UNCTAD was already trying to do that through its Web pages, in which much information about training and other aspects of electronic commerce was available. Experts believed that such efforts should be continued, but it was noted that the ability of countries to access the information might also need to be promoted.

C. Training programmes in preparation

18. A joint presentation was made by the secretariat and other Geneva-based organizations concerning training currently being prepared for the enhancement of electronic commerce. Work had already begun, particularly in the framework of a major project for Arab states funded by the United Nations Development Programme (UNDP). In that context, ITU, ITC, WTO, WIPO and the United Nations Conference on International Trade Law (UNCITRAL) had been contributing to work initiated by UNCTAD with help from selected consultants. That work had led to an approach termed the "e-Trade initiative" The work had recognized the need for improved competence in the two areas of trading and information technology, both of which were needed for enterprises to benefit fully from the potential of electronic commerce, and the following training kits had been prepared:

(a) *Getting Competitive*, covering the basic needs of enterprises to operate effectively at a local level with traditional tools;

(b) *Going International*, to improve the skills needed to enter international business;

(c) *Going On-line*, to improve competence in the use of information and communication technologies; and

(d) *Going eTrade*, to help more advanced enterprises to master the use of electronic commerce in the international environment.

19. The work was being conducted through electronic consultations - using a virtual project office - in which more contributing partners would be welcome. It was expected that the major components of the first kits would be completed by November 1998, so that training of trainers could begin before the end of the year.

20. Those countries that had already undertaken training activities had concentrated on highly placed officials in government and the services sector, who needed to appreciate the potential and current constraints of electronic commerce. It had proved to be very difficult for technicians with the necessary competence to act as trainers, which was another reason for making the training kits widely available. Once good training materials were available, the role of cooperative training networks - such as those coordinated by UNCTAD through its TRAINFORTRADE and TRAINMAR programmes - would be most useful. Those programmes emphasized the training of trainers, which was particularly appropriate for widespread learning and for focusing on local aspects of electronic commerce. There appeared to be an especially important role in that respect for Trade Points, whose activities were also coordinated by UNCTAD. The Trade Points would need to be supported by direct visits from UNCTAD staff or personnel from countries with the greatest experience.

21. While recognizing a wide range of training needs for all concerned with trade, the experts emphasized the need for constantly updated training, information and materials, particularly on electronic commerce, which needed to be customized for policy makers, negotiators, managers, practitioners, technicians and, especially, the personnel of SMEs; they also needed to be

adaptable to local conditions. As training materials needed to reflect a rapidly changing technology and specific local conditions, they had to be both flexible and based on simple principles with wide and durable applicability.

22. It was felt that UNCTAD had initiated a very practical tool with its e-Trade initiative involving the Geneva-based agencies concerned with telecommunications and trade. Although the initiative would initially be focused on work in the Arab region, for which finance had been secured, countries in all regions had a wide interest in the outcome of the initiative and were eager to see the product published and readily available. It was noted that UNCTAD would publish outline details on the Internet and should be able to make a first complete training kit available to certain countries before the end of 1998. It was suggested that for the kits to be kept up to date, they would have to be made available online.

23. Questions were raised as to how to judge the benefits of electronic commerce and how to measure the results of training. It was agreed that observable changes after training were a more important goal for training than the distribution of certificates. Defined ways of observing results would be useful, and the experts recommended that they should be developed by UNCTAD, alone or in partnership with institutes that offered training in electronic commerce and related fields.

D. Development through partnerships

24. The secretariat took the opportunity to explain the potential importance for improving electronic commerce of the Lyon Partners for Development conference. The conference would be the first attempt by UNCTAD to mobilize civil society in meeting United Nations goals in trade and development. One of its two "tracks", identified as GETUP (Global Electronic Trade United Nations Partnerships), would be concerned specifically with various aspects of electronic commerce, covering access, social issues, learning, Internet development, security, the legal environment and speeding up the movement of goods. Different parties interested in each theme were expected to meet together to identify ways of working together to speed up progress in their respective domains. It was intended that all parties with experience or a product of interest would be present at the associated exhibition, and that the exhibits would provide material for the debates within the conference.

25. It was pointed out that while the participation of enterprises, institutes and public authorities with successful experience was vital, provision was needed to ensure that key personnel from the most needy countries, and notably technical personnel from least developed countries, would also be able to participate.

E. Conclusion

26. The Chairman noted that UNCTAD had been congratulated on the documentation prepared for the meeting. There was a continuing role for UNCTAD in informing countries and civil society of developments affecting electronic commerce, and

the secretariat should therefore participate to a maximum extent in the intergovernmental and technical meetings that were currently being widely organized.

27. Electronic commerce had the potential to be a powerful motor for development, with special potential to help SMEs from less developed countries to enter global trade. However, its potential would be achieved only through the knowledge, skills and creativity of people at every level. The development of that human capacity would require dedicated human resource development by countries and enterprises, backed by extensive international cooperation. Concepts that would be vital for truly successful progress to be made were the concept of a learning society, in which influential players constantly updated their knowledge, and that of an open exchange of information, in which developments were constantly appraised and experience was shared. The preparation of learning materials for global distribution, and of local capacity to apply them effectively, would be vital ingredients. The UNCTAD secretariat could play a central role in bringing about such developments, but would need to mobilize international support on a wide scale, including that of international organizations, Governments and civil society. The forthcoming Partners for Development conference at Lyon would provide an ideal opportunity for progress to be made in all those respects.

III. ORGANIZATIONAL MATTERS

A. Convening of the Expert Meeting

1. In accordance with the recommendation made by the Commission on Enterprise, Business Facilitation and Development at the closing meeting of its second session on 5 December 1997,[2/] the Expert Meeting on Capacity-Building in the Area of Electronic Commerce: Human Resource Development was held at the Palais des Nations, Geneva, from 29 June to 1 July 1998. The meeting was opened on 29 June 1998 by Mr. Jean Gurunlian, Director of the Division for Services Infrastructure for Development and Trade Efficiency.

B. Election of officers

(Agenda item 1)

2. At its opening meeting, the Expert Meeting elected the following officers to serve on its Bureau:

Chairperson:	Mr. Anthony Hill (Jamaica)
Vice-Chairperson-cum-Rapporteur:	Mr. Michael Doran (United Kingdom)

C. Adoption of the agenda

(Agenda item 2)

3. At the same meeting, the Expert Meeting adopted the provisional agenda circulated in TD/B/COM.3/EM.6/1. Accordingly, the agenda for the Meeting was as follows:

1. Election of officers
2. Adoption of the agenda
3. Capacity-building in the area of electronic commerce: human resource development
4. Adoption of the outcome of the Meeting

[2/] See Report of the Commission on Enterprise, Business Facilitation and Development on its second session (TD/B/45/3-TD/B/COM.3/11), annex II, paragraph 21.

D. Documentation

4. For its consideration of the substantive agenda item (item 3), the Expert Meeting had before it a paper by the UNCTAD secretariat entitled "Training in the area of electronic commerce: needs and possibilities" (TD/B/COM.3/EM.6/2).

E. Adoption of the outcome of the Meeting

(Agenda item 4)

5. At its closing meeting, on 1 July 1998, the Expert Meeting adopted the agreed recommendations reproduced in section I above, and authorized the Chairperson to prepare a summary of the Meeting (see section II above).

Annex

ATTENDANCE */

1. Experts from the following States members of UNCTAD, attended the meeting:

Bahrain
Belarus
Belgium
Bolivia
Brazil
Canada
Chile
China
Côte d'Ivoire
Cuba
Czech Republic
Democratic Republic of the Congo
Ecuador
Egypt
Ethiopia
Guatemala
India
Indonesia
Iran (Islamic Republic of)
Jamaica
Japan
Kenya
Madagascar
Malaysia
Malta
Mauritius
Mexico
Morocco
Myanmar
Nigeria
Pakistan
Peru
Philippines
Republic of Korea
Romania
Russian Federation
Senegal
Spain
Thailand
Trinidad and Tobago
Tunisia
Turkey
United Kingdom of Great Britain and Northern Ireland
Venezuela
Zimbabwe

2. The following intergovernmental organizations were represented at the meeting:

African, Caribbean and Pacific Group of States
Agency for Cultural and Technical Co-operation
Andean Community
European Community
Islamic Development Bank

3. The following specialized agencies and related organization were represented at the meeting:

International Monetary Fund
World Intellectual Property Organization
World Trade Organization

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*/ For the list of participants, see TD/B/COM.3/EM.6/INF.1.

4. The Economic Commission for Europe and the International Trade Centre UNCTAD/WTO were represented at the meeting.

5. The following non-governmental organizations were represented at the meeting:

General Category

World Federation of United Nations Associations

Special Category

International Centre for Trade and Sustainable Development